

**IN THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1        21. (New) A method for providing printer recognition and management of a print  
2 job entity, comprising:

3              establishing a repository of attributes and status information associated with each  
4 print job that passes through a printer system;

5              providing an interface to a plurality of components to allow access to the attributes  
6 and status information in the repository by the plurality of components; and

7              establishing a job monitor for managing the repository of attributes and status  
8 information associated with each print job, for responding to a call by a printer component  
9 and for managing interactions between printer components in order to control the processing  
10 of the job.

1        22. (New) An apparatus for providing printer recognition and management of a  
2 print job entity, comprising:

3              a repository of attributes and status information associated with each print job that  
4 passes through a printer system;

5              an interface to a plurality of components, the interface providing access to the  
6 attributes and status information in the repository by the plurality of components; and  
7 a job monitor for managing the repository of attributes and status information associated with  
8 each print job, for responding to a call by a printer component and for managing interactions  
9 between printer components in order to control the processing of the job. .

1           23. (New) The apparatus of claim 22, wherein the interface provides an ability for  
2 components to process a job according to requirements of the component and reports job  
3 attributes and processing status of the job for common access by other components.

1           24. (New) The apparatus of claim 22, wherein the interface provides a component  
2 access to common variables, the components presenting job attributes or status to the  
3 interface.

1           25. (New) The apparatus of claim 22, wherein the a repository and interface are  
2 provided by a job monitor, the job monitor further providing logical views to obtain a next  
3 job to be processed by a component and to obtain a list of all jobs in the order that they are  
4 processed.

1           26. (New) The apparatus of claim 22, wherein the job monitor is used to update  
2 attributes of print jobs.

1           27. (New) The apparatus of claim 26, wherein the job monitor determines a next  
2 job to process, the component determining valid states for a call.

1           28. (New) The apparatus of claim 27, wherein the job monitor includes a  
2 multiplexor, and wherein the valid states for a multiplexer further comprise:  
3                 an unknown state for when a job identification is requested; and  
4                 a pull print queue state for the job when the job is stop-flowed at a port connection  
5 manager waiting for access to the printer because a print engine is processing another job;  
6                 wherein the multiplexer receives the job and selects to place the job in a job must be  
7 spooled state, a may spool state or must print state.

1           29. (New) The apparatus of claim 28, wherein the multiplexer routes the  
2 incoming job to the print engine or the spooler according to which becomes available first  
3 when the job is a job that may spool.

1           30. (New) The apparatus of claim 22 further comprising a spooler.

1           31. (New) The apparatus of claim 30, wherein the spooler receiving a job  
2 identification request, enters a not spooled state when the spooler has not yet processed the  
3 job, enters a spooling, can despool state when the job is being written to the spool device  
4 thereby allowing the job to be selected for despooing at any time, enters a spooling,  
5 despooing state when the job is being written to the spool device and is also being read from  
6 the spool device, enters a waiting to despool state when the end of the job has been received,  
7 enters a despooing state when the job is being read from the spool device and written to the  
8 multiplexer and enters the done state when the job is finished being processed by the spooler.

1           32. (New) The apparatus of claim 22 further comprising an interpreter.

1           33. (New) The apparatus of claim 32, wherein the interpreter enters a waiting for  
2 data state when job processing by the interpreter has started, enters an interpreting state when  
3 the job is being processed by the interpreter and enters a done state when the job is finished  
4 being processed by the interpreter.

1           34. (New) The apparatus of claim 22, wherein the a repository and interface are  
2 provided by a job monitor, the job monitor further handling incoming jobs with a port  
3 connection manager, wherein the port connection manager calls to a multiplexer to process  
4 the job.

1           35. (New) The apparatus of claim 22, wherein the a repository and interface are  
2 provided by a job monitor, the job monitor further deciding whether to assign a job to the  
3 printer, whether to assign a job to a spooler, whether the job must wait for available resources  
4 or whether the job cannot be processed.

1           36. (New) The apparatus of claim 22 further comprising a job monitor to fetch  
2 jobs in an order that is dependent upon the calling component.

1           37. (New) The apparatus of claim 36 further comprising a job monitor for  
2 examining process job states and variables to determine the correct response and to return an  
3 appropriate job identification for a job.

1           38. (New) The apparatus of claim 22 further comprising a job monitor for  
2 providing a common method of accessing the variables associated with a job for the  
3 components.

1           39. (New) An article of manufacture comprising a program storage medium  
2 readable by a computer, the medium tangibly embodying one or more programs of  
3 instructions executable by the computer to perform a method for providing printer  
4 recognition and management of a print job entity, the method comprising:  
5           establishing a repository of attributes and status information associated with each  
6 print job that passes through a printer system;  
7           providing an interface to a plurality of components to allow access to the attributes  
8 and status information in the repository by the plurality of components; and  
9           establishing a job monitor for managing the repository of attributes and status  
10 information associated with each print job, for responding to a call by a printer component  
11 and for managing interactions between printer components in order to control the processing  
12 of the job.